

**United States Department of Agriculture** 

Natural Resources Conservation Service Plant Materials Program

# 'Boomer' Bur Oak

### Quercus macrocarpa Michx.

A Conservation Plant Release by USDA NRCS James E. "Bud" Smith Plant Materials Center, Knox City, TX



IUSDA-NRCS James E. "Bud" Smith PMC

'Boomer' Bur Oak, *Quercus macrocarpa* Michx. was released from the James E. "Bud" Smith Plant Materials Center in Knox City, Texas in 1994.

#### Description

Bur oak is a native, perennial, warm-season deciduous tree that can grow up to 50 feet tall and 30 feet wide. It is a slow-growing tree with multiple branches and rigid dark brown bark. The massive trunk will have a diameter of 2-8 feet. The leaves are glossy and dark green and will grow 6-12 inches long and 3-6 inches wide. Bur oak produces large acorns set deeply in a fringed cup. The acorns are 1-2 inches in diameter and mature in one season. There are approximately 85 seed per pound.

#### Source

Boomer was collected from native trees located in Custer County near Clinton, Oklahoma.

#### Conservation Uses

Boomer performs well in dry areas and is used in windbreak plantings on the Southern High Plains and Rolling Plains of Texas and Oklahoma. It consistently outperformed other bur oaks based upon growth rate and habitat under windbreak field conditions. It provides excellent nesting habitat for birds and cover for other wildlife. The acorns are eaten by squirrels, rabbits, mice, and wild hogs. Bur oak also makes an attractive landscape plant for urban and recreation areas by providing dense shade.

#### Area of Adaptation

Boomer is adapted throughout much of Texas and southern Oklahoma. It requires at least 25 inches of precipitation annually, but will grow in areas with as little as 15 inches if supplemental watering is provided during the establishment period.

## Establishment and Management for Conservation Plantings

Bur oak seedlings, as most hardwood species, cannot tolerate competition from grasses and weeds. Carry out weed control in the late summer or early fall before planting with tillage or appropriate herbicides.

Seedbed preparation should begin the year prior to seeding in the fall in an effort to reduce weed competition. Work the site during the summer or early fall prior to seeding to create a firm weed-free seedbed. Seed should be directly seeded in early fall.

For windbreaks, plant Boomer seedlings in the winter to early spring at a spacing of 15-25 feet apart. To improve survival rate, seedlings should be protected from livestock, rodents and other small animal pests, and weed competition.

#### Seed and Plant Production

Boomer is harvested by hand gathering the mature acorns after they have fallen from the tree in the fall.

#### Availability

*For conservation use:* Seed and seedlings are available from several commercial seed companies or nurseries.

*For seed or plant increase:* Breeder seed will be maintained by the USDA-NRCS Plant Materials Center in Knox City, Texas.



2USDA-NRCS James E. "Bud" Smith PMC

For more information, contact: James E. "Bud" Smith PMC 3950 FM 1292 Suite 100 Knox City, TX 79529 Phone: (940) 658-3922 ext. 5 Fax: (940) 658-3095 http://plant-materials.nrcs.usda.gov/txpmc/



3USDA-NRCS James E. "Bud" Smith PMC

#### Citation

Release Brochure for Boomer Bur Oak *Quercus macrocarpa* (Michx.). USDA-Natural Resources Conservation Service, James E. "Bud" Smith Plant Materials Center, Knox City, TX 79529. Published July 2013.

For additional information about this and other plants, please contact your local USDA Service Center, NRCS field office, or Conservation District <<u>http://www.nrcs.usda.gov/</u>>, and visit the PLANTS Web site <<u>http://plants.usda.gov</u>> or the Plant Materials Program Web site <<u>http://www.plant-</u> materials.nrcs.usda.gov>



4USDA-NRCS James E "Bud" Smith PMC

Helping People Help The Land USDA IS AN EQUAL OPPORTUNITY PROVIDER AND EMPLOYER